



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Bahar et al.

Group Art Unit: 1745

Serial No.: 10/675,992

Examiner: TBA

Filed: October 2, 2003

For: AN ULTRA-THIN INTEGRAL COMPOSITE MEMBRANE

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to Rule 56, applicant hereby calls the attention of the Patent Office to the references listed on the attached three PTO-1449 forms.

A copy of the Information Disclosure Statement (IDS) dated November 13, 2003, filed in U.S. Application No. 09/841,253, filed April 25, 2001 (now abandoned) and Form PTO-1449 (1 page) is attached herewith. Copies of these references were filed in related U.S. Application No. 09/921,183 (now abandoned).

A copy of the IDS dated August 3, 2001, previously filed in Application No. 09/921,183, filed August 3, 2001 (now abandoned) and Form PTO-1449 (3 pages). Copies of these references were filed in related U.S. Application No.'s 09/921,183, as well as 09/209,932, filed July 8, 1998; 08/903,844, filed July 31, 1997; and 08/339,425, filed November 14, 1994.

A new PTO 1449 (6 pages) citing 123 documents is attached herewith. These documents are attached.

- ☐ This document is being filed within three (3) months of the filing date of the application
- ☐ A check for the requisite fee of \$180 is enclosed.
- ☐ This document is being concurrently filed with the above-identified application
- ☐ This document is being concurrently filed with an Request for Continued Examination (RCE)
- ☒ This document is being filed prior to a first Office Action
- ☐ This document is accompanied by a Search Report/Communication cited in a corresponding PCT or foreign counterpart application.

AUTHORIZATIONS:

- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 13-4500, Order No. 0769-4582US6. A DUPLICATE COPY OF THIS SHEET IS ATTACHED.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

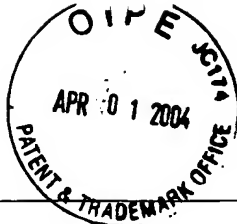
Dated: April 1, 2004

By: 

Eric G. Wright
Registration No. 48,045
(202) 857-7887 Telephone
(202) 857-7929 Facsimile

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, NY 10154-0053



FORM PTO-1449 INFORMATION DISCLOSURE CITATION				Attorney Docket: 0769-4582US6		U.S. Serial No. 10/675,992	
				Applicant: Bamdad BAHAR <i>et al.</i>			
				Filing Date: October 2, 2003		Group Art Unit: 1745	
U.S. PATENT DOCUMENTS							
Examiner Initial		Patent Number	Publication Date	Name	Class	Sub-Class	Filing Date
	1	2,393,967	02/05/46	Brubaker			
	2	2,559,752	07/10/51	Berry			
	3	2,593,583	04/22/52	Lontz			
	4	2,681,319	06/15/54	Bodamer			
	5	2,827,426	03/18/58	Bodamer			
	6	2,951,818	09/06/60	Haagen			
	7	2,965,697	12/20/60	Duddy			
	8	3,041,317	06/26/62	Gibbs <i>et al.</i>			
	9	3,214,501	10/26/65	Strauss			
	10	3,640,829	02/08/72	Elton			
	11	3,679,540	07/25/72	Zimmerman <i>et al.</i>			
	12	3,870,593	03/11/75	Elton <i>et al.</i>			
	13	3,953,566	04/27/76	Gore			
	14	3,962,153	06/08/76	Gore			
	15	4,096,227	06/20/78	Gore			
	16	4,012,303	03/15/77	D'Agostino <i>et al.</i>			
	17	4,065,534	12/27/77	Rechlicz <i>et al.</i>			
	18	4,096,222	06/20/78	Bosley			
	19	4,100,238	07/11/78	Shinomura			
	20	4,110,390	08/29/78	Olcott <i>et al.</i>			
	21	4,178,218	12/11/79	Seko			
	22	4,186,076	01/29/80	de Nora <i>et al.</i>			
	23	4,187,390	02/05/80	Gore			
	24	4,197,148	04/08/80	Shinomura			
	25	4,207,163	06/10/80	Kadija			
	26	4,207,164	06/10/80	Kadija			
	27	4,210,510	07/01/80	Grimes			
	28	4,224,121	09/23/80	Dempsey <i>et al.</i>			
	29	4,262,041	04/14/81	Eguchi <i>et al.</i>			
	30	4,267,364	05/12/81	Grot <i>et al.</i>			
	31	4,313,832	02/02/82	Shimizu <i>et al.</i>			
Examiner				Date Considered			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

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Examiner Initial	Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date	
	32	4,429,000	01/31/84	Naka <i>et al.</i>			
	33	4,437,951	03/20/84	Bissot <i>et al.</i>			
	34	4,469,744	09/04/84	Grot <i>et al.</i>			
	35	4,518,650	05/21/85	Grot <i>et al.</i>			
	36	4,539,256	09/03/85	Shipman			
	37	4,544,458	10/01/85	Grot <i>et al.</i>			
	38	4,568,441	02/04/86	Covitch <i>et al.</i>			
	39	4,629,563	12/16/86	Wrasidlo			
	40	4,664,801	05/12/87	Thomas			
	41	4,720,400	01/19/88	Manniso			
	42	4,774,039	09/27/88	Wrasidlo			
	43	4,726,989	02/23/88	Mrozinski			
	44	4,804,592	02/14/89	Vanderborgh <i>et al.</i>			
	45	4,849,311	07/18/89	Itoh <i>et al.</i>			
	46	4,863,604	09/05/89	Lo <i>et al.</i>			
	47	4,865,930	09/12/89	Kindler <i>et al.</i>			
	48	4,931,168	06/05/90	Watanabe <i>et al.</i>			
	49	4,985,296	01/15/91	Mortimer, Jr.			
	50	4,990,228	02/05/91	Perusich <i>et al.</i>			
	51	4,997,567	03/05/91	Messalem <i>et al.</i>			
	52	5,066,403	11/19/91	Dutta <i>et al.</i>			
	53	5,075,006	12/24/91	Schucker			
	54	5,082,475	01/21/92	Bentz			
	55	5,124,018	06/23/92	Furuya <i>et al.</i>			
	56	5,154,827	10/13/92	Ashelin <i>et al.</i>			
	57	5,183,713	02/02/93	Kunz			
	58	5,186,877	02/16/93	Watanabe			
	59	5,209,850	05/11/93	Abayasekara <i>et al.</i>			
	60	5,234,777	08/10/93	Wilson			
	61	5,256,503	10/26/93	Cook <i>et al.</i>			
	62	5,275,725	01/04/94	Ishii <i>et al.</i>			
	63	5,288,384	02/22/94	Banerjee			
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U.S. PATENT DOCUMENTS							
Examiner Initial	Patent Number	Publication Date	Name	Class	Sub- Class	Filing Date	
	64	5,322,602	06/21/94	Razaq			
	65	5,336,384	08/09/94	Tsou <i>et al.</i>			
	66	5,356,663	10/18/94	Perusich <i>et al.</i>			
	67	5,422,411	06/06/95	Wei <i>et al.</i>			
	68	5,415,888	05/16/95	Banerjee <i>et al.</i>			
	69	5,425,865	06/20/95	Singleton <i>et al.</i>			
	70	5,447,636	09/05/95	Banerjee			
	71	5,468,574	11/21/95	Ehrenberg <i>et al.</i>			
	72	5,472,799	12/05/95	Watanabe			
	73	5,521,023	05/28/96	Kejha <i>et al.</i>			
	74	5,523,181	06/04/96	Stonehart <i>et al.</i>			
	75	5,545,475	08/13/96	Korleski			
	76	5,547,911	08/20/96	Grot			
	77	5,597,659	01/28/97	Morigaki <i>et al.</i>			
	78	5,766,787	06/16/98	Watanabe <i>et al.</i>			
	79	5,795,668	08/18/98	Banerjee			
	80	6,254,978	07/03/01	Bahar, <i>et al.</i>			
	81	RE 37,307 E	08/07/01	Bahar <i>et al.</i>			
	82	RE 37,656 E	04/16/02	Bahar <i>et al.</i>			
	83	RE 37,701 E	05/14/02	Bahar <i>et al.</i>			
	84	2003/0113604 A1	06/19/03	Bahar <i>et al.</i>			
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FOREIGN PATENT DOCUMENTS							
Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation	
	85	0 326 360 A2	08/02/89	EP		N/A	
	86	0 326 632 A1	02/02/88	EP		US 4,731,263	
	87	0 574 791 B1	08/01/95	EP		Abstract & US 5,438,082	
	88	0 574 810 B1	12/22/93	EP		N/A	
	89	0 579 852 A1	01/26/94	EP		N/A	
	90	0 581 510 A1	02/02/94	EP		N/A	
	91	0 594 007 A1	04/27/94	EP		N/A	
	92	0 651 455 A1	05/03/95	EP		US 5,597,659 & US 5,691,005	
	93	0 661 336 A1	07/05/95	EP		N/A	
	94	2 295 982	03/15/77	FR		Abstract & US 4,107,005	
	95	1 339 207	11/28/73	GB		N/A	
	96	2 009 788 A	06/20/79	GB		N/A	
	97	2 026 381 A	02/06/80	GB		N/A	
	98	2 052 382 A	01/28/81	GB		N/A	
	99	2, 091 166	01/14/82	GB		N/A	
	100	2 097 788 A	11/10/82	GB		N/A	
	101	WO 89/06055	06/29/89	PCT		N/A	
	102	WO 91/14021	09/19/91	PCT		N/A	
	103	WO 95/16730	06/22/95	PCT		N/A	
	104	57-134586 C	08/19/82	JP		Abstract	
	105	60-84590	10/21/93	JP		Abstract	
	106	61-276987	12/06/86	JP		Abstract	
	107	62-131038	06/13/87	JP		Abstract	
	108	62-280230	12/05/87	JP		Yes	
	109	62-280231	12/05/87	JP		Abstract	
	110	63-11979 B	03/16/88	JP		Abstract	
	111	63-99246	04/30/88	JP		Abstract	
	112	63-030542	02/09/88	JP		Abstract Only	
	113	64-22932	02/26/98	JP		Yes	
	114	2-230662	09/13/90	JP		Abstract	
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Examiner Initial	Patent Number	Publication Date	Country	Class	Sub-Class	Translation	
	115	2-291607	12/03/90	JP			Abstract
	116	3-15934	03/04/91	JP			Yes
	117	5-75835	10/21/93	JP			Yes
	118	6-29032	02/04/94	JP			Yes
	119	11-58051	03/29/89	JP			Abstract & US 4,849,311
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		Filing Date: October 2, 2003	Group Art Unit: 1745
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, etc.)			
	120	Verbrugge <i>et al.</i> "Composite Membranes for Fuel-Cell Applications" AICHE JOURNAL, Vol. 38, No. 1, Jan. 1992, pp. 93-100	
	121	Taylor <i>et al.</i> "The Effect of Support Morphology on Composite Membrane Performance", Electrochemical Society Meeting, San Diego, Oct. 19-24, 1986	
	122	Asawa "Material Properties of Cation Exchange Membranes for Chloralkali Electrolysis, Water Electrolysis and Fuel Cells", JOURNAL OF APPLIED ELECTROCHEMISTRY, Vol. 19, No. 4, 1989, pp. 566-570	
	123	Börge Glad, <i>et al.</i> "Synthesis of Reactive Composite Membranes from Celgard 2400 and Methacrlate Monomers", J. of Membrane Science, 67, 1992, pp. 289-293	
Examiner		Date Considered	
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